

Notice of Allowability

Application No.

10/571,996

Examiner

MONA M. SANEI

Applicant(s)

MATSUMURA ET AL.

Art Unit

2882

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment After Non-Final filed September 5, 2008.
2. ☒ The allowed claim(s) is/are 1,4 and 6-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20081219.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Fournier on December 19, 2008.

The application has been amended as follows:

In claim 4, line 4, delete "X-ray tube further comprises a".

In claim 4, line 4, replace "electrode deposited" with - electrode is deposited- -.

In claim 4, line 4, replace "an inner" with -said inner- -.

Allowable Subject Matter

2. Claims 1, 4, and 6-20 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art fails to teach or fairly suggest an x-ray tube for emitting x-rays through a transmission window comprising a glass faceplate, which contains an alkaline ion, having a first major surface at least a part of which constitutes a part of a vacuum inner space of a closed vessel, a second major surface opposing the first major surface, a through hole communicating between the first and second major surfaces, and an x-ray target arranged in a space defined by an inner wall of the through hole of the glass faceplate, in combination with all the other limitations of the claim.

Regarding claim 11, the prior art fails to teach or fairly suggest an x-ray tube for emitting x-rays through a transmission window comprising a single glass body, which contains an alkaline ion, having a hollow part in which at least an electron source is arranged, and a top part which continues from the hollow part and has an opening for defining the transmission window, and a protection electrode provided on a region including an edge of the opening of the top part, the region constituting at least a part of an inner surface of the top part which directly faces inside the closed vessel, in combination with all the other limitations of the claim.

Regarding claim 12, the prior art fails to teach or fairly suggest an x-ray tube for emitting x-rays through a transmission window comprising a closed vessel, a glass main body, a glass faceplate having an opening which corresponds to the transmission window and has a maximum diameter smaller than a minimum diameter of an opening of a metal flange that is attached on an opening edge of the main body, and a protection electrode provided on a region including an edge of the opening of the glass faceplate, the region constituting at least a part of an inner surface of the glass faceplate which is directly exposed inside the closed vessel through the opening of the metal flange and opposes the outer surface of the glass faceplate, in combination with all the other limitations of the claim.

Claims 4, 6-10, and 13-20 are allowable by virtue of their dependencies.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONA M. SANEI whose telephone number is (571)272-8657. The examiner can normally be reached on M-W 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mona M Sanei/
Examiner, Art Unit 2882

/Edward J Glick/
Supervisory Patent Examiner, Art Unit 2882